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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,902	02/19/2004	Charles Pfeil	003921.00191	9047
22907	7590	04/25/2006	EXAMINER	
BANNER & WITCOFF 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001			LEVIN, NAUM B	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,902

Applicant(s)

PFEIL ET AL.

Examiner

Naum B. Levin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/24/4 4/13 10/7/5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-5, 7-8, 10-11, 12-16, 18-19, 21-22, 23-27, 29-30, 32-33, 34-36 and 38-40 are rejected under 35 U.S.C. 102(b) as being unpatentable by Van Huben et al. (US Patent 5,966,707).

2. As to claims 1, 3, 11, 12, 14, 22, 23, 25, 33, 34 and 39-40 Van Huben discloses:

(1) A method for simultaneous editing of at least a portion of a printed circuit board (PCB) design by multiple users, comprising (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32):

transmitting the PCB design portion (For example, a printed circuit board could be considered a high level Package comprised of various ASICs, resistors, capacitors and connectors –col.9, ll.27-29, Figs. 2A, 2B) to first and second clients (The design of complex parts, such as integrated circuits, computers/PCBs ... in a complete manufacturing operation like IBM's requires computer capability, with computers capable of processing multiple tasks, and allowing concurrent data access by multiple users – col.2, ll.15-19;) for graphical display at each of the clients (EDA electronic

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design automation- col.5, ll.5-7; The system uses a data management control program ... executable by a supporting machine environment for performing method steps by a data management system having a library organization which receives a request of a user initiated from said displayed client screen and fulfills the request by a providing result via our data management system – col.5, ll. 42-48) (col.2, ll. 15-19; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

transmitting, for display at each of the clients (client screen – col.5, ll. 42-48), a protection boundary associated with a PCB design object being edited at the first client (a second design group which also uses the same DMS to manage their data. Unlike the first design team, this one designs sub-assemblies in which each sub-assembly is treated as a Package. Since this team requires access to multiple packages, their Check-In function may consist of a "wrapper" in the User Interface Layer which-invokes a menu that permits the user to specify a Sub-Assembly name. The wrapper then calls the same DMS Check-In application used by the aforementioned design group – col.10, ll.20-29) (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8); and

rejecting a request from the second client to edit an object within a region bounded by the protection boundary (Assume that user A wishes to set a move lock on file1.type2.varx at the entry level for the purpose of MODEL BUILD. The user would invoke the API call SetLock move file1 type2 varx entry "MODEL BUILD". Referring to FIG. 8, the API call is represented (81). The state table (82) is used to convert the API call into invocations of the Authority Manager File Authority Check (83) and the Lock

Manager SetLock (84) routines – col.17, ll.64-67, col.18, ll.1-4; if (Lock Manager Installed) [query Control Repository for any locks that exist on the file if (locks_ exist) fail the promote] if (Authority Manager Installed) [query Control Repository to see if user has authority to do the promote if (user_ not_ authorized) fail the promote] – col.10, ll.56-64) (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(3) A method for editing a printed circuit board (PCB) master design during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, comprising (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-52; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

transmitting the PCB master design portion to the first and second users at respective first and second clients for graphical display on each of said clients, the graphical displays including representations of PCB artwork corresponding to the PCB master design portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

receiving, during the editing session, a first edit request from the first client and a second edit request from the second client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

applying the first and second edit requests to the PCB master (source) design (col.11, ll. 53-62; col.12, ll. 12-27); and

transmitting synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on the first and second clients during the editing session to reflect the first and second edits (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

(11) A method for editing a printed circuit board (PCB) master design during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, comprising (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-52; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

transmitting the PCB master design portion to the first and second users at respective first and second clients for graphical display on each of said clients, the graphical displays including representations of PCB artwork corresponding to the PCB master design portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

receiving, during the editing session, a first edit request from the first client and a second edit request from the second client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

applying the first and second edit requests to the PCB master (source) design (col.11, ll. 53-62; col.12, ll. 12-27); and

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transmitting synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on the first and second clients during the editing session to reflect the first and second edits (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

determining if the first edit request conflicts with the second edit request, and reporting this conflict to the second client (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(12) A server for receiving and processing requests to edit a printed circuit board (PCB) master design during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, comprising (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-62; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

a database for maintaining the master design (col.12, ll.12-27);

connections to first and second clients (col.12, ll.12-27); and

a processor configured to (col.1, ll.44-55):

transmit the PCB design portion to first and second clients for graphical display at each of the clients (col.2, ll. 15-19; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32),

transmit, for display at each of the clients, a protection boundary associated with a PCB design object being edited at the first client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8), and

reject a request from the second client to edit an object within a region bounded by the protection boundary (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(14) A server for receiving and processing requests to edit a printed circuit board (PCB) master design during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, comprising (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-62; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

a database for maintaining the master design (col.12, ll.12-27);

connections to first and second clients (col.12, ll.12-27); and

a processor configured to (col.1, ll.44-55):

transmit the PCB master design portion to the first and second users at the respective first and second clients for graphical display on each of said clients, the graphical displays including representations of PCB artwork corresponding to the PCB master design portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32),

receive, during the editing session, a first edit request from the first client and a second edit request from the second client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

apply the first and second edit requests to the PCB master design (col.11, ll. 53-62; col.12, ll. 12-27), and

transmit synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on the first and second clients during the editing session to reflect the first and second edits (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

(22) A server for receiving and processing requests to edit a printed circuit board (PCB) master design during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, comprising (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-62; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

a database for maintaining the master design (col.12, ll.12-27);

connections to first and second clients (col.12, ll.12-27); and

a processor configured to (col.1, ll.44-55):

transmit the PCB master design portion to the first and second users at the respective first and second clients for graphical display on each of said clients, the graphical displays including representations of PCB artwork corresponding to the PCB

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master design portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32),

receive, during the editing session, a first edit request from the first client and a second edit request from the second client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

apply the first and second edit requests to the PCB master design (col.11, ll. 53-62; col.12, ll. 12-27), and

transmit synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on the first and second clients during the editing session to reflect the first and second edits (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

determining if the first edit request conflicts with the second edit request, and reporting this conflict to the second client (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(25) A machine-readable medium having stored thereon data representing sequences of instructions which, when executed by a processor, cause the processor to perform steps comprising (col.5, ll. 38-49):

transmitting a PCB master design portion during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, wherein (col.2, ll.15-19; col.2, ll. 64-66; col.5, ll. 5-8;

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col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-52; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

the PCB master design portion is transmitted to the first and second users at respective first and second clients for graphical display on each of said clients (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8), and

the graphical displays include representations of PCB artwork corresponding to the PCB master design portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

receiving, during the editing session, a first edit request from the first client and a second edit request from the second client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

applying the first and second edit requests to the PCB master design (col.11, ll. 53-62; col.12, ll. 12-27); and

transmitting synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on the first and second clients during the editing session to reflect the first and second edits (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

(33) A machine-readable medium having stored thereon data representing sequences of instructions which, when executed by a processor, cause the processor to perform steps comprising (col.5, ll. 38-49):

transmitting a PCB master design portion during an editing session throughout which each of first and second users may edit a PCB master design portion and view edits made to the same PCB master design portion by the other of the first and second users during the editing session, wherein (col.2, ll.15-19; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-52; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67):

the PCB master design portion is transmitted to the first and second users at respective first and second clients for graphical display on each of said clients (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8), and

the graphical displays include representations of PCB artwork corresponding to the PCB master design portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

receiving, during the editing session, a first edit request from the first client and a second edit request from the second client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

applying the first and second edit requests to the PCB master design (col.11, ll. 53-62; col.12, ll. 12-27); and

transmitting synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on the first and second clients during the editing session to reflect the first and second edits (col.2, ll. 15-19;

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col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

determining if the first edit request conflicts with the second edit request, and reporting this conflict to the second client (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(34) A method for editing a printed circuit board (PCB) master design, comprising:

displaying on first and second clients a graphical representation of PCB artwork corresponding to a PCB master design portion (col.2, ll. 15-19; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

editing the PCB master design portion from the first client during an editing session throughout which each of first and second users at the respective first and second clients may edit the PCB master design portion and view edits made to the PCB master design portion by the other of the first and second users during the editing session (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-52; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67);

editing the PCB master design portion from the second client during the editing session (col.5, ll.38-43; col.8, ll.62-67; col.9, ll.26-32; col.11, ll.36-52; col.12, ll.12-27; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67);

updating the display of the first client, during the editing session, to reflect one or more edits made from the second client during the editing session; and

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updating the display of the second client, during the editing session, to reflect one or more edits made from the first client during the editing session (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(39), (40) A machine-readable medium having stored thereon data representing sequences of instructions/method for editing a printed circuit board (PCB) master design during an editing session throughout which each of first and second users may edit exclusive (unshared) sub-portions of a PCB master design portion and view edits made to the PCB master design portion by the other of the first and second users during the editing session, comprising:

transmitting the PCB master design portion to the first and second users at respective first and second clients for graphical display on each of said clients, the PCB master design portion including first and second exclusive (unshared) sub-portions, the graphical displays on each of said clients including representations of PCB artwork corresponding to both the first and second exclusive sub-portions (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.7, ll. 28-45; col.8, ll. 10-15; col.9, ll. 26-32);

receiving edit requests from the first and second clients during the editing session (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32);

accepting requests from the first client to edit the first exclusive sub-portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.7, ll. 28-45; col.8, ll. 10-15; col.9, ll. 26-32);

accepting requests from the second client to edit the second exclusive sub-portion (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.7, ll. 28-45; col.8, ll. 10-15; col.9, ll. 26-32);

rejecting requests from the first client to edit the second exclusive sub-portion (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

rejecting requests from the second client to edit the first exclusive sub-portion (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4); and

transmitting synchronization data to the first and second clients, the synchronization data permitting update of the graphical displays on each of the first and second clients during the editing session to reflect application of the accepted edit requests to the respective first and second exclusive sub-portions (col.2, ll. 15-19; col.2, ll. 51-59; col.2, ll. 64-66; col.5, ll. 5-8; col.5, ll. 38-49; col.6, ll. 65-66; col.7, ll. 4-5; col.9, ll. 26-32).

3. As to claims 2, 4-5, 7-8, 10, 13, 15-16, 18-19, 21, 24, 26-27, 29-30, 32, 35-38

Van Huben recites:

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(2), (13), (24) The method/server/program, wherein the protection boundary comprises the object being edited at the first client (col.9, ll. 26-32; col.9, ll. 65-67; col.10, ll. 1-31; col.10, ll. 56-67; col.11, ll. 1-3; col.16, ll. 57-67; col.17, ll. 1-8);

(4), (15), (26), (35), (37) The method/server/program further comprising locking the object so as to prevent editing of the object based on a request received from the second client (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4);

(5), (10), (16), (21), (27), (32), (36) The method/server/program, wherein the object is at least one of a route, a component, a trace, a via, text, and a drawing object, and the command is at least one of move left, move right, delete and add (col.9, ll.21-54; col.18, ll.24-52);

(7), (18), (29), (38) The method/server/program, wherein the PCB master design portion comprises an entire PCB design (col.9, ll.21-54);

(8), (19), (30) The method/server/program, further comprising determining if the first edit request conflicts with the second edit request (col.2, ll.55-59; col.10, ll.56-67; col.11, ll.1-8; col.16, ll.57-67; col.17, ll.1-8; col.17, ll.64-67; col.18, ll.1-4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 9, 17, 20, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Huben-1 in view of Van Huben-2 et al. (US Patent 5,826,265).

With respect to claims 6, 17 and 28 Van Huben-1 teaches the features above but lacks a method/server/program for editing a master design during an editing session throughout which each of first and second users may edit a master design portion, further comprising applying the first and second edit requests on a first-in-first-out (FIFO) basis (Abstract; col.37, ll.3-6).

It would have been obvious to a person of ordinary skills in the art at the time the invention was made to employ Van Huben-2's teaching regarding the method/server/program for editing a master design during an editing session throughout which each of first and second users may edit a master design portion, further comprising applying the first and second edit requests on a first-in-first-out (FIFO) basis and use it in Van Huben-1's invention to permit queued work to be reprioritized or deleted by the Data Manager, thereby increasing a speed of editing session of large size master design in concurrent engineering environment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naum B. Levin whose telephone number is 571-272-1898. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

N L

Thuan Do
THUAN DO
Primary examiner
04/21/06